REMARKS/ARGUMENTS

Reconsideration of the application as amended is respectfully requested. Claims 1-20 have been canceled. New claims 21-47 have been added. More specifically, claims 3, 13, 15-16, and 19 are canceled for the reason presented below, claims 1-2, 4-12, 14, 17-18, and 20 are amended and represented in new claims 21, 24-29, 31-37, 40, 42-44, and 47, claims 22-23, 30, 38-39, 41, and 45-46 are new. No new matter has been added by virtue of the amendments to the new claims. Support for the amended and new claims can be found in the specification, as described in detail below.

I. Drawing objections

Figures 2-10 are objected to as stated by the Examiner that the details in the images cannot be discerned. Applicants hereby petition to submit three sets of Figures 2-10 in color. The color images submitted hereby are identical to the black and white images submitted in the application. No new matter has been added with the submission.

II. Rejections under 35U.S.C. §112, first paragraph- written description requirement

The Examiner rejected claims 3-10, 13-16, and 19-20 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner stated that the specification describes polynucleotide of SEQ ID NO:6 encoding for a polypeptide of SEQ ID NO:11, and transgenic plants transformed with a construct comprising SEQ ID NO:6 operably linked to a promoter in a sense orientation, said transgenic plants having increased drought stress and freezing tolerance as compared to nontransgenic wild type plants. However, the Examiner asserted that the specification does not describe other isolated nucleic acids that hybridize under stringent conditions to SEQ ID NO:6, or other isolated nucleic acids that encode a polypeptide having at least 90% sequence identity with SEQ ID NO:11. Applicants would like to direct Examiner's attention to pages11-12, wherein it is disclosed in paragraph [0045] that "the nucleotide sequences determined from the cloning of the GBSRP genes from *P. patens* allow for the generation of probes and primers designed for use in identifying and/or cloning GBSRP homologs in other cell types and organism as well as GBSRP homologs from other mosses and related species," and also in paragraph [0043] of page 10 it is stated that a nucleic acid molecule of the present invention can be isolated using standard molecular biology

techniques and the sequence information provided herein. Any person skilled in the art would know how to use the sequence information disclosed in the specification, e.g., the nucleotide sequence of SEQ ID NO:6, to design primers or probes to isolate a nucleic acid, and it is also well known in the art to sequence the isolated nucleic acid and perform the sequence homology analysis to determine if the isolated nucleic acid has at least 90% sequence identity to SEQ ID NO:6, or encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11. As disclosed in paragraph [0056] of page 16, the determination of percent homology is described. Further, the specification discloses in paragraph [0057] of page 16 that an isolated nucleic acid molecule of the invention comprises a nucleotide sequence which is more preferably at least about 80-90% or 90-95% homologous to SEQ ID NO:6, and also in paragraph [0056] of page 16 it is disclosed that the amino acid sequences included in the present invention are more preferably at least about 80-90% or 90-95% homologous to an entire amino acid sequence shown in SEQ ID NO:11 or encoded by a polynucleotide of SEQ ID NO:6. Applicants have canceled claims 3, 13, and 19 drawn to isolated nucleic acids that hybridize under stringent conditions to SEQ ID NO:6. Because the specification has provided the written description for the invention commensurate in scope with the amended claims, Applicants respectfully request that the written rejections to claims 3-10, 13-16, and 19-20 under 35U.S.C. §112, first paragraph be withdrawn.

III. Rejections under 35 U.S.C. §112, first paragraph – enablement requirement

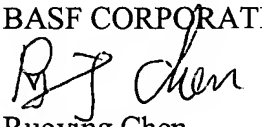
The Examiner rejected claims 3-10, 13-16, and 19-20 under 35U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The Examiner stated that the specification is enabling for a nucleic acid of SEQ ID NO:6 or a nucleic acid encoding SEQ ID NO:11, and for a transgenic plant or plant cell transformed with a construct comprising a nucleic acid of SEQ ID NO:6 or a nucleic acid encoding SEQ ID NO:11 operably linked to a promoter in a sense orientation, said plant exhibiting increased tolerance to drought or freezing stress, and method of making said plants and cells. However the Examiner noted that the specification does not disclose how to make and use other isolated nucleic acids that hybridize under stringent conditions to SEQ ID NO:6, or other isolated nucleic acids that encode a polypeptide having at least 90% sequence identity with SEQ ID NO:11, or that can be used to increase the tolerance of a plant transformed therewith to a specific type of stress. Applicants would like to point out that it is well known in the art that 90% sequence identity is a relatively high homology standard.

Without undue experimentation, a person skilled in the art would be able to select polynucleotides having at least 90% sequence identity to SEQ ID NO:6 (or encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11) that would retain the function of a GBSRP (e.g., a protein as defined in SEQ ID NO:11) by analyzing the sequences utilizing the information disclosed in the specification, such as the "conservative amino acid substitution" technique described in paragraph [0067] of page 21. By further performing the routine screening assay as described in the specification, such as Example 7, a person skilled in the art would know which polynucleotides having at least 90% sequence identity to SEQ ID NO:6 (or encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11) would confer stress tolerance to a plant upon transformation. As discussed above in the written requirement section, Applicants have canceled claims 3, 13, and 19 drawn to isolated nucleic acids that hybridize under stringent conditions to SEQ ID NO:6. Because the specification has provided the enablement description for the invention commensurate in scope with the amended claims, Applicants respectfully request that the enablement rejections to claims 3-10, 13-16, and 19-20 under 35U.S.C. §112, first paragraph be withdrawn.

In light of the amendments and arguments presented herein, Applicants submit that all the rejections contained in the Office Action, dated December 29, 2005, have been overcome. Should the Examiner wish to discuss the application further, the Examiner is invited to telephone the undersigned. If any additional fees are due with respect to this submission, authorization is hereby given to charge such fees, or to credit any overpayment, to Deposit Account No. 02-1197.

Respectfully submitted,

BASF CORPORATION



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